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INFORMATION DISCLOSURE STATEMENT Examining Group 1645 Patent Application Docket No. USF-T190XC1 Serial No. 10/766,157

Doran R. Pace, Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

1645

Applicants

Thomas P. Loughran, Jr., Ravi Kothapalli

Serial No.

10/766,157

Filed

January 28, 2004

Conf. No.

5993

For

Differentially Expressed Genes in Large Granular Lymphocyte Leukemia

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§1.97 AND 1.98

Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. A copy of each cited reference is enclosed. However, Applicants have not submitted copies of the U.S. published patent applications cited on attached Form PTO/SB/08 pursuant to the Notice at 1276 OG 55 waiving the requirement set forth at 37 CFR 1.98(a)(2)(i).

It is respectfully requested that the references cited on the attached form PTO/SB/08 be considered in the examination of the subject application and that their consideration be made of record.

Applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,

Doran R. Pace

Patent Attorney

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DRP/sl

Attachments: Form PTO/SB/08; copies of references cited therein.

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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INF	ORMA"	LION DISCI	OSII	DE	Application Number	10/766,157		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Filing Date	January 28, 2004		
• • • • • • • • • • • • • • • • • • • •					First Named Inventor	Thomas P. Loughran, Jr.		
	(u	se as many sheet	s as nec	essary)	Art Unit	1645		
					Examiner Name			
Sh	eet	1	of	_ 4	Attorney Docket Number	USF-T190XC1		

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figure	
initials -	140.	Number - Kind Code ² (if known)	IVIIVI-DD-T1TT	of Cited Document	Appear	
	U1	US-2003/0190654	10/09/2003	Heidenreich et al.	All	
	U2	US-2003/0032594	02/13/2003	Bonny	All	
	U3	US-2002/0120100	08/29/2002	Bonny	All	
	U4	US-2002/0035243	03/21/2002	lmfeld et al.	All	
	U5	US-				
	U6	US-				
	U7	US-				
	U8	US-				

FOREIGN PATENT DOCUMENTS						
		Foreign Patent Document		No. of Balance	Pages, Columns, Lines,	
Examiner Initials*	Cite No. 1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	т
	F1	WO 01/36646 A1	05/25/2001	Cancer Research Campaign Technology Limited	All	
	F2	WO 02/057311 A2	07/25/2002	University of South Florida	All	
	F3	WO 99/09206 A1	02/25/1999	Blood Research Center	All	Г
	F4					
	F5					Π
	F6					

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Complete if Known Substitute for form 1449B/PTO **Application Number** 10/766,157 INFORMATION DISCLOSURE **Filing Date** January 28, 2004 STATEMENT BY APPLICANT First Named Inventor Thomas P. Loughran, Jr. **Group Art Unit** (use as many sheets as necessary) **Examiner Name** Sheet of 4 **Attorney Docket Number** USF-T190XC1

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials* Cite No. 1 Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
	R1	CALLAN, M. et al. "CD8* T-cell selection, function, and death in the primary immune response in vivo" The Journal of Clinical Investigation, November 2000, pp. 1251-1261, Vol. 106, No. 10.		
	R2	LOUGHRAN, T. P. JR. "Clonal Diseases of Large Granular Lymphocytes" <i>Blood</i> , July 1, 1993, pp. 1-14, Vol. 82, No. 1.	3	
	R3	OSHIMI, K. et al. "Perforin Gene Expression in Granular Lymphocyte Proliferative Disorders" Blood, February 1, 1990, pp. 704-708, Vol. 75, No. 3.		
	R4	LOUGHRAN, T. P. JR. et al. "Anti-CD3 Monoclonal Antibody-Medicated Cytotoxicity Occurs Through an Interleukin-2-Independent Pathway in CD3+ Large Granular Lymphocytes" <i>Blood</i> , February 15, 1990, pp. 935-940, Vol. 75, No. 4.		
	R5	LAMY, T. et al. "Dysregulation of CD95/CD95 Ligand-Apoptotic Pathway in CD3* Large Granular Lymphocyte Leukemia" Blood, December 15, 1998, pp. 4771-4777, Vol. 92, No. 12.		
	R6	KASTEN-SPORTES, C. et al. "T-Cell Receptor Gene Rearrangement in T-Cell Large Granular Leukocyte Leukemia: Preferential V α but Diverse J α Usage in One of Five Patients" Blood, February 1, 1994, pp. 767-775, Vol. 83, No. 3.		
	R7	HOSHINO, S. et al. "Activation via the CD3 and CD16 Pathway Mediates Interleukin-2-Dependent Autocrine Proliferation of Granular Lymphocytes in Patients With Granular Lymphocyte Proliferative Disorders" <i>Blood</i> , December 15, 1991, pp. 3232-3240, Vol. 78, No. 12.		
	R8	DAIBATA, M. et al. "Differential Gene-Expression Profiling in the Leukemia Cell Lines Derived From Indolent And Aggressive Phases of CD56* T-Cell Large Granular Lymphocyte Leukemia" Int. J. Cancer, 2004, pp. 845-851, Vol. 108.		
	R9	MAKISHIMA, H. et al. "DNA microarray analysis of T cell-type lymphoproliferative disease of granular lymphocytes" British Journal of Haematology, 2002, pp. 462-469, Vol. 118.		
	R10	KOTHAPALLI, R. et al. "Constitutive expression of cytotoxic proteases and down-regulation of protease inhibitors in LGL leukemia" International Journal of Oncology, January 1, 2003, pp. 33-39, Vol. 22, No. 1.		
	R11	PERZOVA, R. et al. "Constitutive expression of Fas ligand in large granular lymphocyte leukaemia" British Journal of Haematology, 1997, pp. 123-126, Vol. 97.		
	R12	WESTON, G. S. et al. "Granzymes as Potential Targets for Rational Drug Design" Current Medicinal Chemistry, 1996, pp. 37-46, Vol. 3.		
	R13	EPSTEIN, C. B. et al. "Microaπay technology - enhanced versatility, persistent challenge" Current Opinion In Biotechnology, February 1, 2000, pp. 36-41, Vol. 11, No. 1.		

Examiner	Date	
Signature	Considered	J

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Complete if Known **Application Number** 10/766,157 Filing Date January 28, 2004 First Named Inventor Thomas P. Loughran, Jr. **Group Art Unit Examiner Name Attorney Docket Number** USF-T190XC1

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	ŀ
	R14	MCMANUS, M. T. et al. "Gene Silencing In Mammals By Small Interfering RNAs" Nature Reviews Genetics, October 2002, pp. 737-747, Vol. 3.	
	R15	TAKASHITA, E. et al. "Destruction of hematopoietic microenvironment by cytotoxic T cells" Experimental Hematology, 1997, pp. 1034-1041, Vol. 25, No. 10.	
	R16	CRABTREE, G. R. et al. "Signal transmission between the plasma membrane and nucleus of T lymphocytes" Ann Rev Biochem, 1994, pp. 1045-1083, Vol. 63.	Ī
-	R17	BUTZ, E. A. et al. "Massive expansion of antigen-specific CD8+ T cells during an acute virus infection" Immunity, 1998, pp. 167-175, Vol. 8.	
	R18	ENGLER-BLUM, G. et al. "Reduction of background in problems in non-radioactive Northern blot analysis enables higher sensitivity than ³² P-based hybridizations" <i>Anal. Biochem</i> , 1993, pp. 235-244, Vol. 210.	
	R19	GRAKOUI, A. et al. "The immunological synapse: a molecular machine controlling T-cell activation" Science, 1999, pp. 221-227, Vol. 285.	Ī
	R20	KOTHAPALLI, R. et al. "Microarray results: how accurate are they?" BMC Bioinformatics, 2002, pp. 1-10, Vol. 3.	
	R21	KOTHAPALLI, R. et al. "Characterization of a human sphingosine-1-phosphate receptor gene (SIP ₅) and its differential expression in LGL leukemia" Biochimica et Biophysics Acta, 2002, pp. 117-123, Vol. 1579.	Ī
	R22	KOTHAPALLI, R. et al. "Characterization of a variant of PAC-1 in large granular lymphocyte leukemia" Protein Expression & Purification, 2003, pp. 52-60, Vol. 32.	Ī
	R23	LAMY, T. et al. "Current concepts: large granular lymphocyte leukemia" Blood Rev., 1999, pp. 230-240, Vol. 13.	T
	R24	NAGATA, S. et al. "The Fas death factor" Science, 1995, pp. 1449-1456, Vol. 267.	İ
-	R25	ZAMBELLO, R. et al. "Analysis of the T Cell Receptor in the Lymphoproliferative Disease of Granular Lymphocytes: Superantigen Activation of Clonal CD3+ Granular Lymphocytes" Cancer Res., 1995, pp. 6140-6145, Vol. 55.	İ
	R26	ZIMMERMANN, C. et al., "Homeostatic regulation of CD8* T Cells after antigen challenge in the absence of Fas (CD95)" Eur. J. Immunol., 1996, pp. 2903-2910, Vol. 26.	t

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Complete if Known Substitute for form 1449B/PTO **Application Number** 10/766,157 INFORMATION DISCLOSURE **Filing Date** January 28, 2004 STATEMENT BY APPLICANT **First Named Inventor** Thomas P. Loughran, Jr. **Group Art Unit** 1645 (use as many sheets as necessary) **Examiner Name** Sheet of **Attorney Docket Number** USF-T190XC1 4 4

	NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²				
	R27	KOO, G. C. et al. "Association of Serine Protease with the Rise of Intracellular Calcium in Cytotoxic T Lymphocytes" Cellular Immunology, 1996, pp. 107-115, Vol. 174, Article No. 0300.					
	R28						
	R29						
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	R39						

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